<u>ABSTRACT</u>

An insertion apparatus receives a byte value from a signaling channel, locates a particular unused byte location within an overhead portion of a synchronous optical network (SONET) frame, and inserts the byte value from the signaling channel into the particular unused byte location. An extraction apparatus receives a synchronous optical network (SONET) frame, locates a particular byte location within an overhead portion of the SONET frame that is unused for SONET purposes, and captures a byte value from the particular byte location, wherein the byte value comprises a signaling channel.